

REMARKS

This Amendment and Response is submitted in reply to the Office Action dated November 28, 2003. This Amendment and Response is intended to replace the un-entered Amendment and Response of January 28, 2004. Claims 7, 10, 14, 19, 22 and 24 have been amended. Claims 25-28 have been added. No new subject matter has been added. Claims 7-28 are currently pending. Applicants respectfully submit that the pending claims are in condition for allowance.

The specification has been amended to properly recite that a collecting element 15 of the present disclosure has a tapered distal tip 16 facing away from a trailing end 7 of the blade and an opposing collecting surface 17 facing toward the trailing end 7 of the blade. (Claim 10 has been accordingly amended.) Support for this amendment is found, for example, in Figures 3 and 5, and in original claim 19, which recites the orientation of the tip 16 and surface 17 with respect to a distal end of the shaft. Approval of the amendment to the specification is respectfully requested.

Rejections Under 35 U.S.C. §102

I. Jarvis (U.S. Patent 5,685,673)

The Examiner rejected claims 7-13, 22, 23 and 24 under 35 U.S.C. §102(b) as being anticipated by Jarvis (U.S. Patent 5,685,673). Applicants respectfully traverse this rejection, but have amended claims 7, 22, and 24 to advance this application to allowance.

Jarvis discloses a drill bit 30 with reverse flutes 32, 33. The flutes 32, 33 terminate proximate point 36 in cutting lips 34, 39. The drill bit 30 is designed to drill or cut a bore in bone.

Each of independent claims 7, 22, and 24 recites a device having first and second cutting edges. Claim 7 further recites that the device includes distraction structure having first and second non-cutting surfaces. The first and second non-cutting surfaces define a non-cutting dimension that is greater than a cutting dimension defined by the first and second cutting edges. Claim 22 further recites that the device includes a non-cutting height dimension between first and second distraction surfaces. Claim 24 further recites that the device includes first and second non-cutting surfaces separated by a distance.

Each of independent claims 7, 22, and 24 recites that the non-cutting dimension or distance is greater than a cutting dimension or distance defined by the cutting edges. The drill bit 30 of Jarvis simply does not disclose a non-cutting surface as characterized by claims 7, 22, and 24.

In an advisory action dated February 13, 2004, the Examiner stated that the term "distracting" is taken as functional and that the term must result in a structural difference between the claimed invention and the prior art. Each of claims 7, 22, and 24 have been amended to clarify that the distracting structure of each of the claims is a non-cutting distraction feature. Specifically, in claim 7, the distraction structure has non-cutting surfaces; in claim 22, the distraction surfaces have a non-cutting dimension; and in claim 24, the first and second non-cutting surfaces are separated by a distance.

Jarvis does not disclose a non-cutting structure that has a non-cutting dimension greater than a cutting dimension of the cutting edges. Rather, the cutting dimension is defined by the cutting lips 34, 39 and the helical flutes 32, 33 that extend up the body 31 of the drill bit 30. The cutting dimension of the drill bit 30 is understandably the largest dimension of the drill bit 30. Jarvis does not have non-cutting surfaces that define a non-cutting dimension greater than a cutting dimension of the cutting lips and the flute edges. At least for these reasons, Applicants respectfully submit that claims 7-13, 22, 23 and 24 are patentable.

II. McGurk-Burleson et al. (U.S. Patent 4,867,157)

The Examiner also rejected claims 14-16 and 21-24 under 35 U.S.C. §102(b) as being anticipated by McGurk-Burleson et al. (U.S. Patent 4,867,157). Applicants respectfully traverse this rejection, but have amended claims 14, 22 and 24 to advance this application to allowance. Applicants reserve the right to pursue the original subject matter via a continuing application.

McGurk discloses a cutting instrument 211 having a helical cutter blade 86. The helical cutter blade 86 has opposing cutting edges 87 and 88 (FIG. 14), and two flutes or channels 90 and 91.

A. Claims 14-16, and 21

Claim 14 recites a curette including a blade having first and second concave regions, and first and second cutting edges. The curette also includes a collecting element including a collecting surface oriented to face the trailing end of the blade.

First, Applicants respectfully submit that if the channels 90 and 91 of McGurk are to be characterized as concave surfaces, the channels cannot also be properly characterized as a collecting element. The Examiner is improperly using a single structure or element in McGurk as disclosure for two separately recited elements of claim 14.

Nonetheless, Applicants have amended claim 14 to clarify that the collecting element includes a surface oriented to face the trailing end of the blade. McGurk simply does not disclose a collecting surface oriented to face the trailing end of the blade. If the channels 90, 91 are to be characterized as a collecting element, none of the channel surfaces face the trailing end of the blade, as recited in claim 14.

At least for these reasons, Applicants respectfully submit that independent claim 14, and dependent claims 15, 16, and 21 are patentable.

B. Claims 22-24

Claims 22 and 24 each recite a device having a blade with first and second cutting edges. Claim 22 further recites that the blade includes first and second distraction surfaces. A non-cutting height dimension extends between the distraction surfaces; the non-cutting height dimension being greater than a cutting height dimension extending between the cutting edges. Claim 24 further recites that the blade includes first and second non-cutting surfaces. A second distance separates the first and second non-cutting surfaces and is larger than a first distance that separates the cutting edges.

The helical cutter blade 86 of McGurk clearly does not disclose distraction or non-cutting surfaces configured to have a distance or non-cutting height dimension greater than a distance or dimension between cutting edges 87, 88. Rather, the helical cutter blade 86 of McGurk has helical cutting edges 87, 88 about an outer diameter of the blade that define a cutting dimension. The cutting dimension defined by cutting edges 87, 88 is the largest dimension of the blade. McGurk does not disclose a non-cutting dimension greater than a cutting dimension. At least for this reason, Applicants respectfully submit that claims 22-24 are patentable.

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 17-19 under 35 U.S.C. §103(a) as being unpatentable over McGurk-Burleson (U.S. Patent 4,867,157) in view of Jarvis (U.S. Patent 5,685,673). Applicants respectfully traverse this rejection.

Claim 17-19 depend upon claim 14. In view of the remarks regarding independent claim 14, further discussion regarding the independent patentability of dependent claims 17-19 is believed to be unnecessary. Applicants submit that dependent claims 17-19 are in condition for allowance.

New Claims 25-28

New claims 25-27 depend upon claims 7, 22 and 24 respectively. At least for the reasons discussed above with respect to claims 7, 22, and 24, Applicants respectfully submit that claims 25-27 are patentable.

New claim 28 recites a surgical device for curetting an intervertebral disc including a blade having first and second rounded distraction surfaces positioned at opposite sides of the of the axis of rotation, the distraction surfaces facing outwardly from the axis of rotation and being separated by a distraction dimension that passes through the axis of rotation, and first and second cutting edges positioned at opposite sides of the axis of rotation, the first and second cutting edges being separated by a cutting dimension that passes through the axis of rotation, the cutting dimension being less than the distraction dimension. None of the cited references discloses rounded distraction surfaces and cutting edges arranged as recited in claim 28. Applicants therefore respectfully submit that claim 28 is patentable.

SUMMARY

It is respectfully submitted that each of the presently pending claims (claims 7-28) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicants' representative at the below-listed telephone number if it is believed that prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentably distinct. Applicants reserve the right to raise these arguments in the future.

Respectfully submitted,



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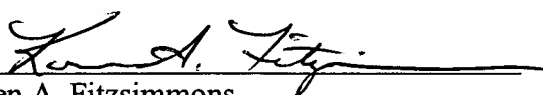
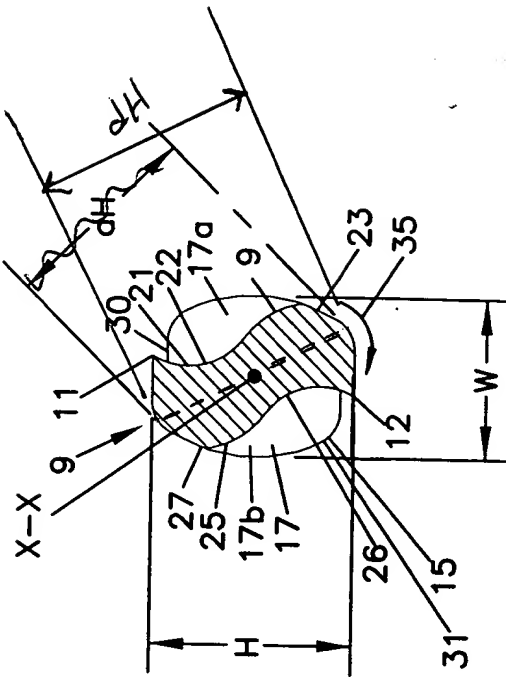

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FIG. 4



Dimension dH
 re-oriented to
 be perpendicular
 to dashed line.

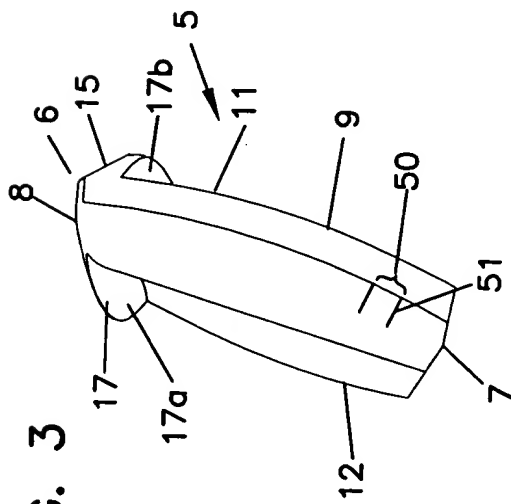
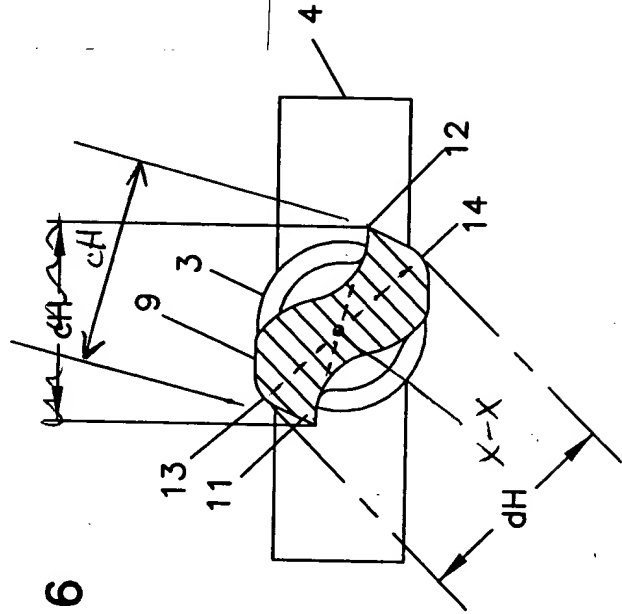


FIG. 3

FIG. 6



Dimension dH
 re-oriented to be
 perpendicular to
 dashed line;
 Added X-X.

FIG. 5

